[title page]

SADC Railways Restructuring and Policy Options
An Overview

Southern Africa Transport and Communications Commission Technical Unit
Maputo, Mozambique
August 1997

[verso title page]

Prepared by the Southern Africa Transport and Communications Commission Technical Unit (SATCC-TU)

Copies of this report can be obtained from the SATCC-TU, Caixa Postal 2677, Maputo, Mozambique

Edited and produced by Nathan Associates Inc., Arlington, Virginia

August 1997

Contents

Illustrations

Preface

The Southern Africa Transport and Communications Commission (SATCC), with financial assistance from the U.S. Agency for International Development (USAID), commissioned the Study on SADC Railway Restructuring Options (SARRO), which was conducted from June to October 1996. The study team initially reviewed the success of the SADC railways in moving towards commercialisation. Later the team researched the principal issues and restructuring options available for SADC railways, the international experience with railway restructuring, and the application of railway concessioning to the region. At the SADC Railway Policy Options Workshop, held 9–11 September 1996 in Pretoria, the SARRO team presented the following papers:

- Review of Some Key Issues with Regard to SADC Railways Restructuring and the Evaluation of the Desirability of Separating Management of Rail Infrastructure from Operations (E. M. Hachipuka),
- International Experience with Railway Restructuring (S. Kasy Aiyar), and
- Application of Railway Concessioning to the SADC Region (J. Sondhi).

Other papers presented at the workshop were

- Concession in Railways: Main Concerns (Y. P. Kedia),
- Meeting the Restructuring Challenge (Robert M. Reid), and
- The Investor's Perspective (Steven Graubart).

This report presents an overview of the SADC railways restructuring and policy options and is the work of SATCC-TU officials SMAK Kaombwe, Godwin Punungwe, Remmy Makumbe, and Donald Fritz and the SARRO team of J. Sondhi, S. Kasy Aiyar, and E. M. Hachipuka.

1. Introduction

In 1996, SATCC, with financial assistance from USAID, commissioned the Study on SADC Railway Restructuring Options (SARRO). The study team reviewed the success of initiatives taken towards commercialising the railways and researched the principal issues and restructuring options available for SADC railways, the international experience with railway restructuring, and the application of railway concessioning to the region. At the SADC Railway Policy Options Workshop, held 9–11 September 1996 in Pretoria, papers were presented by SARRO consultants, an official of the World Bank, an investor, and a representative of a management consultant involved in the restructuring of state-owned enterprises (SOE). This report summarises the work of SATCC officials and the SARRO team and contributions made and opinions expressed at the workshop by authors of papers and by delegates.

Minister Mac Maharaj of the Republic of South Africa in his opening address at the workshop summed up the nature of and remedy for the railway problem as follows:

> For years, the competitive advantage of railways has been steadily eroded by a combination of factors which included the effective use of modern technology by competitors, and rising service expectation of customers. In order to survive this fiscal crisis, railways must reinvent themselves. 'Business as usual' is futile. Fundamental change is needed to restore the cost at an improved service quality advantage that rail can provide vis-à-vis other modes. To this end, restructuring has proved effective in numerous real world cases, with the resultant revival of rail as a relevant transport mode.

Conclusions reached at the workshop include the following:

- SADC railways have generally made some restructuring progress in recent years, yet none of the railways has achieved sustainable commercial viability.
- Some form and degree of privatisation is essential for SADC railways to achieve sustainable commercial viability.
- The key factor that makes privatisation essential is the need for continuous, assured managerial autonomy, which is not possible when the government retains the authority to make management appointment, operations, business, and investment decisions for the railway.
- For privatisation to be an effective and permanent approach to the provision of railway infrastructure and services, the rail industry must be largely deregulated. Any regulations for which there is a real and continuing need, such as safety regulations, must be rational.
- Deregulation permits market entry by intramodal and intermodal competitive transport operators, and it is competition that effectively regulates the transport industry, ensuring rapid response to the market, introduction of technological advances, achievement and maintenance of high standards of performance, and competitive pricing for services.
- It is also necessary that government transport and taxation policies do not create economic distortions by favouring one surface transport mode over another.
- Concessioning is the preferred privatisation approach, but the optimal form and extent of concessioning may differ from railway to railway. The concessioning options that might be desirable for one or another railway include

  - — Vertical concession (i.e., infrastructure plus operations),
  - — Functional concession,
  - — Service concession, and
  - — Joint venture concession.

  Any of these might be for a portion of the national system, the entire national system, an area that extends beyond a single national system, or a regional rail corridor.
- Separation of infrastructure from operations is an attractive restructuring option only if it extends to privatisation. Infrastructure responsibility or operations or both might be concessioned. The option of creating two parastatals to separately take on responsibility for infrastructure and operations does not appear to be desirable for SADC railways.
- Although outright sale is another possible approach to railway privatisation, the approach is not favoured except to the extent that it might be applied to noncore business or to unremunerative operations, such as low-volume branch lines. Partial sale of the railway through its corporatisation and sale of equity shares could lead to privatisation once the majority of shares is held by the private sector. However, this approach to privatisation is less attractive to SADC governments and railways than the concession approach because the latter could be carried out more quickly and might give more assurance of achieving the objectives of privatisation. This assurance could be provided by tailoring the concessions to the objectives and by monitoring and enforcing the performance clauses of the concession agreements.

The workshop further identified a need for SADC governments to make firm, complete, and continuous commitments to railway restructuring. The conclusions, which reflect the consensus of various group discussions at the workshop, are presented in this report in the Appendix.

2. Status of Railway Restructuring in SADC Region

In recent years, governments and railway managements of SADC countries have developed a perception that railways should be run as commercially viable enterprises. The governments are not willing to provide financial support to railways except in cases in which the governments require railways to provide specific public services at prices below cost (PSO). Initiatives have been taken by several SADC railways towards restructuring to achieve commercialisation.

All railways in the region are owned by the state, and the governing boards and chief executives are government appointees. Attempts have been made in the past to commercialise the railways by giving them a fair degree of authority within the overall framework of government ownership as parastatals. However, it is clear that real autonomy, which allows the management of railways to make decisions based on business considerations and free of political interference, is not possible if railways remain parastatal entities. After gaining experience from the privatisation of other parastatal entities in the context of economic reforms, and with unsatisfactory progress in railway commercialisation, some of the governments are now considering privatisation of railways as an option.

Most SADC states are establishing policies of economic liberalisation. In the past, governments were procuring and distributing agricultural inputs and produce in bulk, and transport of these commodities was mainly by rail. With liberalisation, there is a significant reduction of bulk movement by rail of food grains, fertiliser, and other products because the state is progressively moving away from trade in these commodities. Diversification and processing trends of agricultural products tend to favour road transport over rail transport because of the importance of delivery time savings and reliability. Customer needs are also changing rapidly because they operate in a more competitive environment.

The railways of the region need to become market driven, understand customers' requirements, and design services to meet emerging customer needs. A sustained marketing effort is required not only to retain existing customers, but also to attract new customers. Because the markets are changing rapidly, the response has to be swift and dynamic. Customers today are more demanding and seek higher levels of service in predictability, transit time, integrated door-to-door service, security, tracking of consignments, and speedy settlement of claims.

Most railway managements are aware of the problems of overstaffing and have made commendable efforts in downsizing the work force. In certain cases, however, the lack of cash has slowed down the progress in reduction of staff. Railways have also identified locomotive and rolling stock surpluses over the requirements for current levels of traffic and have either withdrawn them from service or scrapped them to conserve the effort and cost of maintenance.

Several governments are using the railway managements as the agents for designing and carrying out the restructuring process. This method, however, is not proving successful because those who have long been running the system are naturally attached to the current structure and are therefore not likely to be enthusiastic about radical changes.

The railways of the SADC region face stiff competition in the transport market because in the past decades the road infrastructure has developed rather rapidly. Progressive upgrading of roads and introduction of heavier, more fuel-efficient and cost-effective trucks has led to faster road transport at

lower cost. Reopening of some of the corridors that were not available earlier because of civil wars and other reasons has added capacity to a comparatively low-density transport sector. Thus, SADC railways are operating in an environment of intense competition with road transport in a thin market. Railways believe that they face unfair competition because the road vehicles pay only a small proportion of road infrastructure costs, whereas railways pay the full cost of infrastructure.

The lack of financial resources has constrained the implementation of restructuring plans. Some railways have not been able to retrench the identified surplus staff because of a lack of funds. Additional resources will be required for downsizing the work force and for essential modernisation to improve service quality and reduce unit costs. Thus, external injection of funds is, in many cases, essential for successful restructuring.

Almost all railways have inadequate reserves for replacement of assets because depreciation has been charged on a historical cost basis. A few railways have revalued assets and have started charging depreciation based on current replacement cost. Some of these railways have relatively small equity and large government debts. Capital restructuring will be required to achieve effective commercialisation.

Several railways in the SADC region are experiencing problems in attaining financial viability, and those that are now viable are having difficulty sustaining it over the medium term. The railway managements and governments are keenly aware of the deep-rooted problems of the railways' nonviability and are seeking remedial measures. Five of the railways studied appear to be trapped in a vicious circle. Because of a lack of cash, they are unable to maintain their assets, resulting in progressive deterioration in service. This deterioration in service leads to loss of traffic and revenues, which in turn result in further deterioration in service and decline in financial viability. The key to achieving both the national and SADC regional railway objectives is to vastly improve the operations and financial results of such railways.

All the railways studied have taken steps towards commercialisation in the past few years. The degree of success in achieving commercial viability has been uneven, however. Two of the railways are marginally viable, whereas others have been able to reduce their losses as a result of cost containment measures. Three railways are in the process of appointing independent consultants for evaluating the most appropriate option for privatisation, including concessioning. One railway proposes to separate infrastructure from operations.

Railways in the region are now facing the challenges posed by several factors, namely

- Loss of traffic from other SOEs because of economic reform,
- Withdrawal of financial support by the government,
- Excess capacity in the transport sector,
- Intense competition from road transport,
- Changing needs of customers in service quality, and
- Functioning in a framework of government ownership as parastatals.

These railways, in order to survive, have to transform themselves into market-driven, service-oriented, customer-friendly, and financially-viable businesses. They will need to provide flexible and innovative products, offer competitive service, and operate at high technical efficiency.

3. Principal Issues in Restructuring

For any railway restructuring attempt to be successful, some principal issues must be addressed. Failure to address them previously is a fundamental reason for the current crisis of the SADC railways. These issues, however, are by no means peculiar to SADC. All state-owned railways of the world have faced or are facing similar problems. In fact, most of the problems arise from two basic features common to all such railway systems: (1) problems of state ownership and (2) problems of competition between rail and road.

AUTONOMY

SADC railways operating as SOEs have generally had little autonomy in the management of railways. Decisions such as fixing of tariffs, staff retrenchment, abandonment of unprofitable passenger services, and indeed, all major investment decisions, often have had to be referred to the government even after board approval, no matter how rational these decisions may have been from a business point of view. With the slowness in decision processing by government, such references and consequent delays have often meant loss of business opportunities.

Recently some attempts have been made to confer autonomy through the use of memoranda of understanding (MOU) or performance contracts. The essence of these MOUs and performance contracts is that the railway managements commit to the government that they will perform to a certain degree of efficiency, and in return the government will give them autonomy in various areas. In practice, however, these agreements have failed to help. There are at least two reasons for such failure. First, it has often been noticed that the governments rarely take the document as a serious commitment on their part and hence fail to fulfill their obligations. Second, the working out of performance contracts itself takes so much time that, during the preparation period, there is little agreement to go by.

Both of these causes have occurred in SADC countries. In other countries of the world, autonomy for SOEs has also been a very difficult problem. Good and bad governments have found it difficult to allow SOEs the degree of autonomy necessary to make business decisions. The essential nature of business decisions is calculated risk taking, which is impossible in public enterprises because of their very nature. Consider this point: The ultimate shareholders in SOEs are the people of the country. Ministers in charge of SOEs are accountable to the public and to the Parliament for the decisions of SOEs. Moreover, parliamentary committees probe past actions of SOEs. In well-run governments these probes through parliamentary questions and parliamentary committees, which have the advantage of hindsight, make rational decisions (which turn sour for unforeseen causes) the subject of highly publicised criticism from Parliament, the press, and the public. The ministers in charge in good governments, would therefore have their SOEs make decisions that conform to well established, unquestionable government procedures so that they are easily defensible under scrutiny. In many other countries the actions of SOEs are also subjected to the scrutiny of the comptroller and auditor general of the country. This battery of checks has weakened the public sector in the best run countries and converted it to little more than routine government departments devoid of commercial vigour. In less

well-run countries, SOEs have often been used by unscrupulous managers and ministers as an instrument for promoting and serving their private interests, often to the serious detriment of the SOEs.

Railways in most countries are subject to various macroeconomic factors well beyond their control. In developing countries, droughts and other natural disasters make a mockery of the targets set in the agreements with government. More often than not the railways' finances suffer from such natural disasters, but sometimes these disasters also artificially boost railway performance, as happened when the railways were called on to carry large food grain traffic during the severe drought in Africa a few years ago.

Often the employees of the state-owned railways become entitled, either directly or indirectly, to revisions in pay scales and perks that apply to government departments. Thus, railways in many countries are suddenly burdened with increases in wages totally unrelated to increases in productivity or ability to pay.

Still another problem arises from soft contracts. These contracts occur because the railway management's access to and ability to understand information pertaining to the railway is usually far better than that of the government department that is the other party to the contract. It is therefore possible for the railway to secure a contract that is easy to carry out and on the surface most satisfactory to both parties. The result is usually not a challenging contract that will bring out the best efforts of the railways.

Detailed research in several countries has conclusively established the ineffectiveness of these instruments in insulating the SOEs from day-to-day interference by government. Recent quantitative research has conclusively established that such MOUs rarely improve performance and often do more harm than good.

As long as the railways continue as SOEs and continue to receive financial support from the government, real autonomy will be impossible. Even if they become commercially viable and need no support from government, autonomy will still be unattainable.

MANAGEMENT CONTROL

Often a distinction is made between long-term control of major policy decisions and short-term, or day-to-day, decisions, which are discussed in this section.

The SADC governments have attempted to distance themselves from the railway managements by, in certain cases, creating separate entities, including limited liability companies. They have, in most cases, also reorganised railway boards. The directors of these boards have been drawn from professions, commerce, and industry, have extensive experience, and are well educated. They have been selected to improve the calibre of the boards. In most cases the chairmen of the boards are from outside the civil service.

Notwithstanding this practice, political bosses have found it necessary to participate in day-to-day decision making. More often than not, such decisions have not been in the interest of the railways' long-term economic health.

Political interference in day-to-day decision making is not peculiar to SADC railways; there is enough recorded evidence to show the high degree of political interference prevalent in the United Kingdom, for example. With bitter sarcasm, the London *Economist* stated, "Nothing (beyond ordering paper clips) that the nationalised corporations did escaped cabinet attention. And interference. The board members and management became frustrated."

Foster, an eminent authority on public enterprises, writes of a "constant irritating stream of intervention usually on small matters of passing but intense interest to politicians." Arbitrary intervention in day-to-day matters of public enterprises is the rule rather than the exception in most

countries. The quantum of interference is usually determined by the character of the minister and the chairmen of the boards. The stronger the character and the greater the skill of the minister in public relations with board members, the more is the power wielded by the minister. The power of the board is also weakened by budgetary deficits, exceptionally heavy investment requirements, and failure in public relations.

INDEBTEDNESS

For historical reasons, most SADC railways find themselves in such deep debt that they have severe problems servicing it. There is, therefore, need for governments to assume these loans as part of the railway restructuring by converting to equity or taking over the repayments to reduce the financial burden on the railways while creating acceptable financial conditions for the railways to make new investment decisions.

Here again experience elsewhere in the world is similar. Most public enterprises, especially railways, become deeply indebted and are incapable of servicing their debt burdens by the time they realise they have a problem. Consider the following examples. The Japanese National Railways (JNR) had accumulated debts of more than US$337 billion in spite of annual government subsidies of US$5 billion. Argentinean railways' annual losses were more than US$1.3 billion. The government's inability to finance these losses led to privatisation, despite severe opposition. Swedish Railways, New Zealand Railways, Chilean Railways, British Railways, Malaysian Railways, and many other railways of the world that are operated as SOEs or government departments have incurred astronomical debts, which their respective governments have found difficult to service. Indeed, one of the common characteristics of SOEs all over the world has been huge indebtedness.

OVERSTAFFING

Most railways in SADC countries are overstaffed. Railways, like other state-owned enterprises, have been used by many governments for employment generation. The extent of overstaffing is so large that most railways have to shed half or more of their staff. Several SADC railways have already started the process and have achieved some success. One railway has removed surplus staff from its rolls, but their final separation has been delayed because of inadequate funds to pay their full compensation. Other railways have identified the quantum of surplus staff but have been unable to proceed with retrenchment because of inadequate funds.

State-owned railways elsewhere in the world also have had to face this problem of surplus staff. For example, Swedish Railways had to reduce its staff by 40 percent when restructuring. JNR has similarly reduced staff from more than 200,000 to approximately 130,000. In Argentina, railway employment was reduced from more than 90,000 to less than 20,000. These reductions were achieved during the process of restructuring financially nonviable or declining railways into healthy, viable, growth-oriented systems.

Staff reduction is indeed one of the most painful issues in any restructuring effort in railways. The first and most important requirement is a mutually understood and humane severance programme. Substantial funds are required for carrying out the severance programme because the numbers are usually large. In countries in which unemployment levels are already high, retraining surplus staff so that they can find alternative avenues of earning a livelihood may be necessary.

RESTRUCTURING FUNDS

Before a run-down, state-owned railway can be turned into a profitable one, considerable expense and investment are required. The funds for paying compensation to the surplus staff can be quite large considering the number of excess staff of most SADC railways. In addition, funds are necessary to improve the quality and standards of maintenance of plant and equipment to improve operation and reduce accidents.

Some of the SADC railways are now in a type of "debt trap," in which lack of funds for urgently needed improvements and right-sizing of staff take them deeper and deeper into debt. This vicious cycle of poor operation, reduced revenue, greater debt, and still poorer operation can be broken by injections of funds in a rational manner.

Once again, this feature is common to most state-owned railway systems all over the world. Astronomical sums of money have been injected into poorly run and highly indebted railways in Japan, New Zealand, the United Kingdom, the United States, and several other countries at the time of restructuring and revitalising. The U.S. Government spent more than US$6.5 billion to revitalise and sell Conrail on the New York Stock Exchange for US$1.6 billion, resulting in net government expenses of about US$5 billion. The New Zealand government spent NZ$2,500 million to create an equity base of NZ$150 million for New Zealand Rail Limited.

The direct financial burden of restructuring railways borne by the government can be reduced. One of the preferred methods for reducing the burden is concessioning, which is discussed in detail later in this paper.

COMPETITION

With the liberalisation of the SADC economies, the railways have found themselves organisationally and culturally ill-prepared to face the competition from road transport. With historically production-oriented culture that is not market driven, the railways now have extra equipment and infrastructure capacity that do not match traffic levels as traffic is diverted to road transport. Road transport offers a higher quality of service than does rail transport. Because of the railways' poor financial health, railway infrastructure in some countries is in such a poor state that the quality of rail service is continuously deteriorating, resulting in further loss of traffic. The situation is exacerbated by apparent lack of a level playing field, because railways, unlike their competitors, have to provide for the building of infrastructure and its maintenance. The issue of level playing field needs to be addressed by all governments through the introduction and enforcement of policies that ensure that all competitors pay adequately for the provision and maintenance of infrastructure.

Again, the phenomenon of roads competing more and more fiercely with rail and forcing them deeper and deeper into the red is a global phenomenon. Although it is true that road hauliers do not pay the full "economic" cost of infrastructure, or even the "financial" cost (in some countries), the growth of road traffic cannot be attributed merely to the lower cost structure that the road hauliers enjoy. The extreme flexibility of road transport from the user's point of view, the use of modern technology to economically provide on-call services, door-to-door deliveries at precisely scheduled times, single-point transactions and documentation for shipments across several countries, and a host of other user-friendly features make road transport the choice of many customers even when freight rates are high by road. The road hauliers' flexibility in pricing makes them even more formidable competitors.

Legal constraints on road traffic rarely help railways to compete efficiently in the long term; rather, they provide short reprieves from competition, which tend to lull railways into complacency. Meanwhile, the road hauliers are sharpening their competitiveness even further and making "the final

kill" with even greater facility. The example of New Zealand arbitrarily limiting the road hauls to short distances to prevent road transport from competing with railways amply proves the futility of such constraints. Railways have to develop competitive transport capability by orienting themselves to customer needs. Rather than thinking of roadways as a competitor, railways could and should develop their own road services and thereby provide integrated, cost-effective service.

A small agile railway in Chile illustrates the point. Antofagasta and Bolivia Railway has adopted state-of-the-art technology in both its own internal working and customer service and has an integrated road delivery system. This railway is perhaps the only one in the world that has more than 100 years of profitable private existence and is even now handing out big dividends to its shareholders and at the same time expanding its network.

REGULATION

Regulation of railways is still a major handicap militating against fair competition between railways and other modes of transport in many countries. As one of the oldest "monopolies," they are also one of the most regulated. Two categories of regulation may be identified for purposes of analysis. The first group of regulations are economic in nature and refer to regulation of the freights and fares and provision of services. The second group of regulations refer to the statutory mechanisms instituted for ensuring safety and standards of service.

The first group of regulations have largely become irrelevant because they were conceived to prevent excessive profits and other undesirable monopoly behaviour and have no relevance now with so many other modes of transport becoming readily available. Their effects have severely crippled the railways and damaged the economy because they have severely delayed and often prevented major railways from closing even small uneconomical branch lines. Thus, they have placed severe strains on the railways, often leading to their insolvency, and consequently on the economy of the country as a whole.

The second group of regulations refers to safety and standards of service and is essential. In this group, too, much change is needed. The problem has been the slow pace at which classical railway systems have been able to take advantage of state-of-the-art technology to achieve more effective safety standards at reduced costs. This slow pace has been caused primarily by existing regulations. For example, most countries require an end of train brake van (caboose) and a guard to ensure continuity of train. This safety requirement can be much better accomplished (and has indeed been accomplished in several railway systems of the world) by using electronic sensing devices. Modern electronics has made possible steep and continuing reductions in cost, coupled with increasing reliability. There is a case for all states and railways to carefully scrutinise their rule books and institutions and catapult them from 19th century to 21st century technology.

Deregulation of rates and service provisions, abandonments and mergers of railway lines, and elimination of a host of other restrictive practices in the United States, particularly after the Staggers Act in 1980, has demonstrated the remarkable way in which deregulation can assist vitalisation of a weakened railway system and restore competitive vigour. After 1980, many of the uneconomic branch lines of large railway systems were, and are still being, spun off into a large number of so-called "small railways." These small railways are able to operate their respective lines economically by adopting appropriate technology and manpower, a degree of flexibility that would never have been possible for the large railway systems. Deregulation has, in fact, enabled a natural restructuring of U.S. railroads in an economically efficient manner.

BREAKING THE CYCLE

Competition is the key to sustained efficiency and stability. Attempts at improving economic efficiency through regulation are often misdirected and usually create a cycle of nationalisation, privatisation, nationalisation (see Figure 1). This cycle occurs as follows:

- Private ownership introduces a degree of entrepreneurial vigour, which leads to immediate improvements in service.
- However, if there is a degree of monopoly, there will be a natural tendency to earn excessive profits. Regulatory mechanisms of some type soon become necessary to ensure that the private monopolistic practices (including prices charged for services) are fair.
- Regulation of price or return on investment has a built-in risk of undermining the incentives for firms to operate efficiently. The result may be a decline in profitability leading to deterioration of service, often caused by inadequate capacity to invest in essential capital equipment. Service may degrade to such an extent that public takeover becomes inevitable.
- Thereafter, with loose budgets and an absence of incentives, subsidies snowball as efficiencies decline. There is growing disenchantment with the public enterprise providing poor services at increasingly higher cost.
- There is a move to privatisation, and the cycle starts again.

The answer to whether the cycle will continue to rotate, or will rotate faster or slower, depends on the extent of government or other regulation. The more regulation there is, the more will be the propulsive force. The only way to reduce need for regulation and control by the government or "independent" regulatory agencies, is to create conditions of automatic regulation through competition. Self-evident though it may be, this point is emphasised here because the new structure will remain stable to a greater or lesser extent depending on how strong the forces of competition are. Restructuring will have to introduce the element of competition as one of the principal factors to ensure long-term success and stability of new structures.

REFERENCE

Gomez-Ibanez and Meyer. 1993. *International Experience with Transport Privatization.* Washington, D.C.: Brookings Institution.

4. Restructuring Process and Options

PROCESS

General Considerations

SADC railways agree that there is urgent need to reform the railways to make them financially viable. The days appear to be gone when railway managements believed that they were performing a social service and assumed a continuously increasing state subsidy to meet their deficits. In the past few decades, even treasuries of some of the richest countries (e.g., Japan) have found it impossible to fund increasing subsidies for railways year after year. SADC railways have seen the emerging trends worldwide and have been attempting to render their own railways more viable by various means, including drastic reductions in the number of employees. One railway is seriously considering the possibility of separating infrastructure from operation. Several railways are considering privatisation as an option and investigating the best methods for privatising such a complex entity as the railways.

Key Implementation Steps

The following six steps are essential for successful restructuring:

1. Set aside all notions of what the company should look like and who should own or control what. Establish a long-term comprehensive planning approach based on stakeholder objectives.
2. Identify restructuring options that will maximise long-term objectives within a comprehensive business planning framework.
3. Carefully analyse all options and identify the most efficient provider of the resources, service, or physical assets (unbundling of assets).
4. Quantify financial benefits of the options.
5. Introduce commercial behaviour and requisite governance to public sector operations.
6. Maintain sensitivity to human resource issues.

PRIVATISING OPTIONS

Privatising options for railways include outright sale, public offering of stock, franchising, and concessions. Table 1 presents the features of various railway restructuring options.

Internal Restructuring

Most efforts by SADC railways at restructuring have been internally generated**.** At least in two countries presidential commissions have been appointed to privatise SOEs, but so far the commissions have not examined any railways.

In the current state of the railways, radical restructuring is required if there is to be any significant achievement. Existing management is perhaps the least suited to carry out any radical restructuring. Quite understandably, existing management would be attached to existing practices and cannot be expected to be enthusiastic about radical changes.

Separation of Infrastructure from Operations

At least one railway in the SADC region is considering separation of infrastructure from operation. The European Commission's directive to keep separate accounts for infrastructure and operation was aimed at providing a rational basis for charging for the use of the infrastructure of the country by trains of another country running on it. The Swedish model, however, has a deeper economic objective of providing a level playing field (i.e., charging the railways and the road hauliers on a similar basis for every ton of axle load). This objective has resulted in increasing deficits for the railway system as a whole. Operations show profits and infrastructure shows sharply increasing deficits. In the long term, "competitive access" may result from competition between operators. A way might be found to arrest spiralling infrastructure costs. Available evidence, however, suggests that separation of infrastructure from operations is likely to increase total costs of the system as a whole, at least for the first few years. Imminent need for huge investments makes this option irrelevant for SADC railways, at least for the time being.

Outright Sale

Even if the sale of a national railway to a private party is politically acceptable, it is unlikely that transfer of ownership of a railway to a foreign company will be feasible in the SADC states. Moreover, the value of even a comparatively small railway is expected to be beyond the financial capacity of national buyers. Outright sale of a railway also has the danger that the new owners would resort to asset stripping and would, therefore, not concentrate on turning the railway into a viable enterprise. Experience shows that preparing a railway for sale takes up to 10 years. Sale of a railway normally cannot be reversed. It is unlikely that any railway in the region will be considered for sale.

Public Offering of Stock

Public offering of shares to domestic investors could be a viable option. This option will be particularly suitable for a railway that is already corporatised, has been successful in its restructuring, and has good prospects for growth and profitability given the injection of private capital. Lack of an established stock market and profitable railways preclude the application of this option in most SADC states.

Franchising

A franchisee is not required to fund investments for asset renewal or expansion. It is required to provide rail services using the assets owned by the SOE. It is free to fix tariffs and commercial conditions. The franchisee pays a fee for the use of assets and is responsible for the maintenance of assets in use at its own cost. Because most SADC railways need capital investment, franchising is not considered an appropriate option.

Competitive Access

If the infrastructure is separated from operations, it is possible to provide competitive access to different operators on the basis of rationally determined user charges. Provision of competitive access is likely to bring in benefits of competition in general. For example, even a small competitor to Swedish Rail (the main operator on the Swedish rail infrastructure) was able to bring in cost-reducing innovations that then were copied by the major operator.

Even where infrastructure and operations are not organisationally separated it may be possible to provide competitive access if rational methods for charging for infrastructure use are developed and

uniform technical standards are developed to enable free cross-border movement. Beginnings have already been made with the signing of the Protocol on Transport, Communications and Meteorology. The SATCC-TU and the Southern African Railways Association (SARA) play important roles in developing rules and standards for competitive access.

Management Contract

Management contracts are usually entered into between the owner (the state) and a private firm that takes up the contract to manage the enterprise. Management contracts are usually awarded on the basis of an open or limited tender and are useful where there is a reasonably well-run enterprise needing little new investment. The SADC railways are in need of major investments in many different areas, and the sources of funds for these investments are not clear. There is serious overstaffing. Under these circumstances it will be difficult to draw up management contracts that will essentially attempt to bind the contractor to performance levels without any reasonable assurance of investments and other action areas.

Concession

Concessions amalgamate management, investment, and maintenance contracts into a single package and make the duration sufficiently long so that the contractors have reasonable chances of reaping the fruits of their investments.

A concession is a privatising option that enables the retention of ownership by the state or a public entity while providing the benefits of efficiency and profitability of a private business. Moreover, the concessioning contract is for a limited period—10 to 30 years in the case of railways. The concessionaire pays a fee for the use of assets, makes a commitment to maintain assets, and invests for additions and improvements according to the terms of the contract. Normally the concession agreement provides freedom to fix tariffs and other commercial conditions. The concessionaire furnishes a bond to support the commitment to invest.

One of the advantages of the concession approach to privatisation is that the initial capital cost for taking over the operation of the railway is lower than that for outright purchase, which broadens the market for private sector participation and enhances competition. Furthermore, implementation of the concession option is simpler and generally takes much less time than the sale of a railway.

A concession is a flexible arrangement that can be designed to suit a variety of specific conditions while leaving the formal ownership of the existing assets to the state. The issue of national pride and concerns with respect to the sale of a high visibility asset or its right pricing, which could arise in the case of outright sale, are adequately addressed through the concessioning option.

When the parastatal railway retains responsibility for most or all of the infrastructure of the rail system, the railway itself may be the entity that enters into a concession arrangement with one or more concessionaires. Thus, a positive service concession or a function concession for all or some aspect of operations would normally be an arrangement between the parastatal railway and the concessionaire. The railway itself might also enter into a competitive access arrangement or into a joint venture, and the likelihood of a railway entering into such arrangements is improved if the railway is a corporation. Vertical concessions, however, are generally between the railway owner, (i.e., the government) and the concessionaire, and negative concessions are only possible when the government takes on the responsibility of meeting the revenue shortfalls.

ARGUMENTS FOR CONCESSIONING OF RAILWAYS

There are four arguments for concessioning of railways:

- A parastatal railway is in difficulty, and other approaches to achieve commercial viability do not appear to be sufficient to turn around the enterprise on a sustainable basis.
- Investment is required for improving efficiency, increasing capacity, or both. Concessioning represents a means of tapping private sector funds to induce the desired investment.
- Manageability of the enterprise would be improved through improved efficiency resulting from a competitive environment and business-oriented management.
- Of the privatisation options, concessioning is the preferred approach to development and operation of the railway because the alternatives of sale of railways to private parties is not feasible or is politically unacceptable.

Concessioning of railways will yield substantial benefits in several areas, such as autonomy and freedom from political pressures, access to capital, business orientation and private sector management culture, strongly motivated management and work force, turnaround in minimum time, and ability to meet the challenges of a competitive and changing market. All of these concessioning advantages have generally eluded SADC railway enterprises during the ongoing internal restructuring efforts in the framework of government-owned parastatals. Other reasons that make concessioning a preferred option include retention of state ownership; award of concessions through a transparent, competitive, and contestable process; minimum state investment before privatisation; short preparation and contract finalisation period; and the flexibility of the concession instrument. In most SADC states, other options of privatisation are either politically not feasible (outright sale) or cannot be carried out for lack of established stock markets and the railway's lack of a record of profitability (public offering). **Thus, of the various options for the privatisation of railways, concessioning is the preferred, although not the only, option for SADC railways.**

INTERNATIONAL EXPERIENCE IN RAILWAY PRIVATISATION

Barring a few exceptions, most countries today see privatisation as the most appropriate way of restructuring to provide sustained efficient performance and continued financial viability of railways. Privatisation leads railways to fundamental rethinking of their business, which can lead to fundamental improvements in their efficiency and effectiveness. Financial market discipline is enforced on the railways, which then act as monitoring agents with self-interest at stake. Privatisation is often irreversible and therefore its positive effects are more permanent, whereas any achievements under state ownership can be reversed quickly by policy makers.

Since being privatised, New Zealand Railways operates at a profit in spite of the total deregulation of the road trucking industry. This is clear testimony to the efficiency of the private sector management culture. Before privatisation the railways suffered huge losses in spite of the regulation of truck transport to ridiculously low levels of traffic. Trucking was restricted to below 40 miles until 1977 and then to 150 kilometres until 1983.

Privatisation of Argentinean railways reduced federal subsidies from US$1.3 billion a year before privatisation to US$0.3 billion after privatisation. Japanese railways were losing US$5 billion every year before action was taken to privatise; following partial privatisation, they now realise net gains on the order of US$6 billion a year. All parastatal railways that have been privatised have dramatically improved financial performance following privatisation.

Improved performance was achieved through more efficient management and the adoption of modern technology. Reducing the crew from three people to one by electronic end-of-train detectors and reliable, continuous communication amongst train drivers and between train drivers and the Central Dispatch is one instance of use of modern technology by private operators to improve efficiency. Another is use of computer-assisted train dispatch systems. These systems were installed immediately on takeover by the concessionaire in Argentina; similar modernisation was also applied in New Zealand. Modernisation in these cases was aimed at improving efficiency, cutting costs, and thereby generating positive financial returns.

5. Application of Railway Concessioning to SADC Railways

It is now accepted that governments do not perform as well as the private sector in a host of activities. It is also well known that public ownership of enterprises leads to serious conflicts that undermine efficiency because of the conflict that arises between the priorities of business managers and those of politicians in charge of enterprises. Invariably the political imperatives take precedence over commercial considerations of public enterprises. Bureaucracy and lack of accountability for financial decisions coupled with inadequate performance-based incentives lead generally to poor-to-indifferent performance of SOEs.

Several economic reformers have stated that privatisation of SOEs is an essential element for establishing a market economy and improving economic performance of developed, as well as developing, countries. It has been argued by others that privatisation is an effective instrument for separating political and economic decision making, reducing inflation, reducing external debt by attracting foreign capital investment, and reallocating public resources from subsidies for SOEs to investments in infrastructure, employment generation, education, and health. These arguments apply to railways in the SADC region because they all are owned by the state. Privatisation of railways is expected to generate benefits that have eluded these enterprises during the ongoing internal restructuring efforts in the framework of government owned parastatals. **The broad objective is to obtain service-oriented transformation of the railway through private sector participation, resulting in the commercialisation of the railway and an end to dependence on state funding.** Discussion in the preceding section led to the conclusion that **of the various options for the privatisation of railways, concessioning is the preferred, although not the only, option for SADC railways.**

GOVERNMENT CONCERNS AND POSSIBLE SOLUTIONS

For a concession to be successful, certain concerns must be recognised and addressed by the governments. Important concerns and measures to address them are discussed in the following paragraphs.

Loss of Control over a Strategic Institution

With the development of road transport, the strategic importance of railways has diminished considerably. Specific conditions in the agreement that ensure priority to designated traffic in periods of emergency (e.g., food grains during famine) and government permission for actions perceived to be against national interest can address such concerns. Award of a concession to a joint venture in which the government has a minority share is another remedy.

Service Deterioration or Discontinuance

Provisions in the contract that specify minimum services to be provided and penalties to be imposed for failure to do so are generally adequate for ensuring the continuation of essential services with satisfactory standards of performance.

Deterioration in the Quality of Infrastructure

A possible solution is the establishment of a dedicated depreciation fund to which the concessionaire will contribute an agreed amount annually for the exclusive purpose of rehabilitation and overhaul of infrastructure. Any balance in the fund at the end of the concession reverts back to the owners of the railways. A similar fund could also be established for maintenance. A periodic inspection by an independent authority and by an agreed method (e.g., by a track-recording car) could provide adequate assurance for the quality of infrastructure. Penalties for failure could also be specified.

High Cost of Transport and Monopoly Abuse

This concern applies where competition by another mode or route is absent. The contract should grant track use to another operator, at a predetermined fee, to guard against monopoly abuse by the concessionaire. Routes or commodities for which market competition is inadequate can be identified through performance monitoring, undertaken as a check against possible excess profits.

Subsidy for Public Service Obligation

The contract is normally quite clear on the subsidy payable by the government for PSO services, and the concessionaire will have the means to enforce the relevant provision in case the government fails to abide by the terms of the agreement.

Safety and Liability for Accidents

A regulatory authority to take care of safety and environmental aspects is essential. The concessionaire's liability for accidents is clearly defined in the agreement. Enforcement of agreed standards for safety (and maintenance) is ensured through random checks by a regulatory authority and annual inspection by an independent expert.

Traffic Growth Beyond Projections and Windfall Profits

A provision in the agreement that links the concession fee with traffic levels is considered an adequate protection.

Staff Redundancy

Need for downsizing of staff is not unique to concessions and is dictated by the objective of attaining viability. It is useful to downsize staff before concessioning. The terms for redundancy payments for staff reductions by the concessionaire are specified in the agreement. The agreement might state that a specified proportion of the staff employed by the concessionaire must come from the existing railway staff.

Low Priority to Transport Business

This problem can arise if the concession permits activities other than transport, and care should be taken in preparing the concession document to limit noncore business uses of leased land and facilities,

perhaps by reserving these opportunities for the railway owner. Specification in the agreement of the minimum services that the concessionaire must provide helps to avoid inadequate attention to transport services that otherwise might occur.

Failure of the Concession

This concern can be addressed by a careful screening of prospective bidders so that only those with good records and credible business plans are invited to bid. A joint venture could also help if the agreement has a provision for the government to take over the management of the railway in the event that the concession is deemed to have not met specified criteria. (These criteria, however, must be clear and must be such that that the provision cannot be invoked by government on the slightest provocation.) A mechanism for quick resolution of disputes also needs to be included in the agreement.

Failure of the Concessionaire to Return Concession Assets in Agreed Condition

An appropriate remedy must be built into the agreement along with a mechanism for quick resolution of disputes. If additional assurance is desired by the railway owner, the agreement can require that the concessionaire regularly make deposits into an account for maintenance and restoration of assets and that these funds are used only for the specified purposes.

POSSIBLE OPTIONS FOR CONCESSION CONTRACTS

Types of concessions are distinguishable by their degree of integration, ranging from the fully integrated, or system, concession to the subfunction concession. Some of the most common variations are discussed in the following paragraphs.

Fully Integrated Concession

A fully integrated concession is one that is vertically and horizontally integrated. The concessionaire takes on the responsibility for all railway functions and for all portions of each function. The railway system owner needs only to monitor the concession, take action whenever anything is amiss, and collect whatever payments are owed under the terms of the concession agreement. It should be noted that the concessionaire need not actually *perform* all functions; it is still a fully integrated concession if the concessionaire *bears the responsibility for performance* of all functions.

Vertically Integrated Concession

The only distinction between a vertically integrated concession and a fully integrated concession is that some of the railway system functions are not the responsibility of the concessionaire. For example, the concessionaire might not perform passenger services, or the concession might be limited to a single rail line, even a branch line. The railway concessions in Argentina are vertically-integrated, and the rail line concessionaires have full responsibility for rail operations and rail asset renewal, including all railway functions.

Functionally Separated Concession

All concessions that are not vertically integrated are functionally separated. This type of concession might cover one or more of the four major railway functions (train operations, track maintenance, equipment maintenance, and sales and marketing). A possible choice is a concession covering functions other than infrastructure provision and maintenance. The concessionaire, in that case, would

maintain equipment, market services, and operate trains. As with the vertically integrated concession, the functionally separated concession might be for the entire system or for a single rail line, or it might be for a single service over the entire system or over a single rail line.

Concession for Specific Service

A functionally separated concession can be limited to a single type of service or to one type of service on a specific route. For example, the concessionaire might operate all of the passenger trains on the railway system or just those in an urban area. Some of these might be **negative concessions**. That is, instead of the concessionaire paying a net amount for track and other facility rental, the concessionaire is paid, by government, to perform services. A specific-service concession can also be useful for the introduction of new or upgraded services. For example, in the SADC region there is limited development of intermodal services, and a prospective concessionaire might be invited to invest in the facilities and equipment that, together with one or more rail routes, would permit the operation of cost-effective and reliable intermodal services, such as the movement of containers from a wide inland hinterland to one or more deepwater ports.

Intersystem Concession

Intersystem concessions involve more than one railway owner and might be vertically integrated or functionally separated concessions. Most commonly, they involve an international rail route. For example, a single concessionaire might enter into a tripartite agreement with Malawi Railways and Mozambique's CFM (North) for the route from Lilongwe or Blantyre to Nacala. This intersystem concession might be limited to providing a single service, such as biweekly freight trains over the full route, or it might extend to all services, or it might be vertically integrated, with the concessionaire taking on all responsibility for maintaining the permanent way and all terminal facilities along the route, as well as performing some or all services.

Joint Venture Concession

Joint venture concessions might also be vertically integrated or functionally separated, and they might be unisystem or intersystem in nature. An intersystem joint venture concession means that two railway owners hold shares of the joint venture. Because the purpose is to induce private sector participation and investment, the private sector partner would normally hold the majority share (i.e., more than 50 percent), and the railway or railways would hold minority shares. An advantage of the joint venture approach is that others besides the private operator can become parties to the arrangement. For example, a major shipper that relies heavily on the railway in question might want to hold a minority share, which would carry with it membership on the board of directors of the joint venture. Governments also might favour the joint venture approach because they would have membership on board of directors and therefore a channel by which to influence the decisions made by management. Furthermore, government representation on the board is useful to preclude the development of any feeling of distrust on the part of government that could arise when it is entirely excluded from concessionaire business planning and discussions. The private sector partner takes over the managerial control of the concession and also brings in an agreed amount of investment to improve assets and operations. The public entity may not bring any cash to the joint venture but may transfer equipment to the joint venture instead. The stated merit of this variation is that the public entity continues to be involved in the management of the railway through its nominees on the board of directors, and in case the concession is unsuccessful, the public entity will be able to resume the management of the railway.

INVESTOR AND CONCESSIONAIRE PERSPECTIVE

Rationale and Objective for Participation

Investors are attracted to the railway business in the SADC region because they see potential for growth as economic reforms progress. Rail transport is a core activity of the economy, and they are interested in concessions as a business. They add value to the railway business by providing capital, management and technical expertise, and total solutions to customers to match their transportation requirements. They believe that they can play a catalytic role in transforming the railway.

Factors Influencing Level of Interest

Several factors influence the level of interest of investors in a potential concession. These factors include

- Potential returns and risks;
- Growth potential of the market and market share of the railway;
- Valuation of the cash that can be generated and not the value of assets;
- The condition, management, and performance efficiency of the transport system as a whole, including the ports and terminals;
- Condition of track and upgrading requirements;
- Employee issues;
- Fees expected;
- Project development costs; and
- Commitment of politicians, bureaucrats, and railway officials to the restructuring and concessioning process.

Considering that railways attempting concessioning are not in a “sellers market” (i.e., there is not a long list of potential concessionaires waiting for parastatal railways to become available) to maximise the benefits of the concessioning process, it is desirable that these factors be as “investor-friendly” as possible.

Bidders will be attracted to the proposed concessions only if they see a fair prospect of a profitable business, and risks are not too high. Sufficient bidder interest is essential for generating competition in bidding, which, in turn, helps to obtain the best possible terms for the concession for the railway owners. An essential condition is that the concession terms be fair to both parties. Splitting railways into “defensible” market segments, shedding noncore business, downsizing the labour force, and separating out any PSO services are some of the actions that need to be taken before a concession is considered ready for bidding.

Invariably, a fair marketing effort to broaden interest and enhance competition will be required.

DESIGN OF CONCESSIONS

Preparing for Concessions

Given the objectives of a railway, it is feasible to design concessions to meet the specific requirements of SADC railways that want to restructure with private sector participation. It is stressed, however, that great care must be taken in the preparation, design, and implementation of railway concessions to enhance the chances of success and avoid conflicts with the concessionaire.

Concession of a government-owned railway must be viewed as a fundamental change, one having political, economic, and social implications. The events leading up to the start of the concession need to

be managed in the context of "management of change." A variety of skills is required, first in defining the objectives of the concession, then in tailoring each feature of the bidding document and the concession agreement, and finally in carrying out the preliminaries required before the actual concession comes into effect. Governments and railways are normally unfamiliar with the legal and administrative details of such instruments and therefore need to take special care to protect their interests. A series of steps needs to be taken over an extended period to achieve a successful concession.

These steps include the following:

- Clearly defining the concessioning objectives.
- Passing legislation to indicate commitment to privatisation and to enable and guide concession arrangements.
- Setting up an intermediary agency to manage the process of change having political, economic, and social implications.
- Adequately funding the agency.
- Establishing a schedule that is both ambitious and realistic for bringing about desirable change in the shortest possible time.
- Carrying out significant restructuring before concessioning to make concessions attractive to bidders.
- Enlisting donor assistance for funding severance pay for the surplus staff and some essential investments.
- Identifying any market segments that are suffering losses, yet are socially desirable, and arranging for their separation as PSO services.
- Preparing a business plan that indicates the definitive strategy of the railway and the projected profitability of the business.
- Revaluating assets and redefining the capital structure to ensure that the enterprise carries only as much debt as it can service.
- Studying the legal implications of the Railway Act, land use, labour, tariff deregulation, line closure, and the like.
- Setting up a new entity with sufficient assets and staff to operate the segment of business selected for concessioning. The surplus assets and staff are generally retained by the original railway.
- Preparing an information document for prospective bidders that indicates the business plan, investments expected, condition of infrastructure and equipment proposed to be transferred to the concessionaire, staff, period of the proposed concession, and the like.
- Appointing a consultant to assist in the preparation of bid documents, marketing, evaluation of bids, negotiation of contract, and transfer of assets to the selected concessionaire.
- Marketing the concession through mail, advertisements, and road shows.

Design Elements

General

Although the flexibility of concessioning is attractive, it brings with it the requirement for the careful design of the contract to address the interests of various parties (the consumer, the public authority, and the investors) in a balanced manner while meeting the specific objectives of the railway and the conditions and environment of the country. Each concession is thus a customised instrument that has to

be developed with unique features to meet specific objectives. Several features of railway concessions need to be designed carefully to ensure that objectives of the concession are clearly understood by the concerned parties and the scope for misunderstandings and disputes is minimised.

Duration

A concession is granted for a fixed period and at the end of the specified term, most assets, including those financed by the concessionaire, as well as the right to carry out the activity, return to the public entity. The duration of the contract is normally related to the time the investors need to recover their investment. It is recognised that it will not be possible to amortise fully all the investments made, especially those made towards the end of the concession. A provision could therefore be considered for a payment to be made by the public authority to the concessionaire, on the basis of an independent evaluation, to encourage appropriate investments and proper maintenance thereof throughout the period of the concession. Provision for renewal of concession is sometimes made. The government generally reserves the right to terminate the contract before the end of the normal term.

Investment

Some investments that are considered essential for the provision of agreed level of service and need to be made “up front” will be clearly identified and will normally be the responsibility of the concessionaire. It will also be the concessionaire’s responsibility to make additional investments to enhance capacity and service quality to meet market needs and operational improvements, including technological upgrading to reduce unit costs. The investments required in the early part of the concessioning period are precisely indicated. However, it may not be possible to predict investments for the entire period of the concession, and later investments could be left to the discretion of the concessionaire.

Legal Ownership

The legal status of the assets provided by the concessionaire can vary. Normally such assets will remain in the ownership of the private operator until their transfer to the state at the end of term of the concession. Besides giving full control to the operator, this facilitates the financing of the concession by making these assets available as collateral. There are, however, cases in which assets built and financed by the concessionaire are owned by the state as soon as they are built.

Other Features

The following features of railway concessions need to be designed carefully to ensure that objectives of the concession are clearly understood by the concerned parties and the scope for misunderstandings and later disputes is minimised:

- Scope of the concession indicating railway functions to be carried out;
- Lines and routes to be covered;
- Type of services to be covered by the concession;
- Links between concessioning fee and traffic levels;
- Extent of use of employees of the former railway;
- Responsibility for the payment of severance pay to surplus employees;
- Deregulation of tariffs;
- Establishment of a depreciation fund for the overhaul and rehabilitation of assets;

- Assumption of all business risks by the concessionaire;
- Extent of inclusion of real estate in the concession; and
- Basis and value of the performance bond to be provided by the concessionaire.

Single Transborder Concessions

There are at least three cases, in the SADC region, in which a single concession of a railway on two sides of a border appears to be the only possible way to attain railway viability:

1. The Tanzania–Zambia Railway (TAZARA), which is a jointly owned by and serves Tanzania and Zambia, is an obvious case for a single concession.
2. A single concession for Malawi Railways and CFM's Nacala Line would also make eminent commercial sense.
3. A single concessionaire would be appropriate to rehabilitate and operate the Swaziland–Mozambique rail connection.

In these cases, the success and viability of railways depends upon the performance of the corridor as a whole, and intersystem (or transborder) concessions are considered appropriate.

Competitive Access

A concession or a franchise that makes possible the operation of freight trains travelling through more than one country will facilitate the growth of long-distance traffic. The concessionaire could operate trains on a "competitive access" basis and pay a fee to the national railway (or the local concessionaire). If the national railway does not have separate accounts to establish the cost of infrastructure usage, an organisation such as SATCC or SARA might devise a system of fixing fees on a fair basis to provide an environment of fair competition. Such an arrangement will not only generate competition, but will also promote the concept of integrated seamless service across national borders. Competitive access is not only useful for cross-border services, however, but can help to enhance the competitiveness, and therefore the efficiency, of all railway services. In particular, competitive access is effective for the setting of rail tariffs because monopolistic pricing has no place in a competitive environment. Provided that there is competitive access on much or all of the SADC regional railway network, there is likely to be no need for governments to regulate railway service pricing.

Passenger Services

Railways of the SADC region are essentially "freight railways," although most do also provide some passenger services (the exception being Swaziland Railways, which provides no passenger services). Passenger services are invariably commercially nonviable and need subsidisation from the railway freight services. It would be helpful if, for attaining commercial viability, SADC railways were to be relieved of the need to invest in passenger service equipment and to operate passenger services. There is an urgent need for evaluation of the need for passenger rail services, especially in areas served by parallel roads because any uneconomical service is a drain on the economy. The rail passenger services considered essential should be provided through negative concessions, with the difference between cost and revenue being borne by the state. It is probably eminently desirable that concessions be arranged for freight service, and that passenger services be operated by a separate entity as PSO.

Monitoring and Regulation

It is necessary to monitor concessions for the purpose of safety (including quality of track), consumer interests, and environmental aspects. A suitable regulatory authority is therefore required to be established to monitor and regulate aspects that are not explicitly covered in the concession agreement, and appropriate statutory powers are vested in the regulatory authority to enforce various obligations of the concession.

SELECTION, NEGOTIATION, AND IMPLEMENTATION OF CONCESSIONS

Once expressions of interest in a concession arrangement are received, the railway owner (or the railway) might proceed as follows:

- Invite broad-based plans from prospective bidders for the concession and prepare a short list of those considered acceptable.
- Prepare the short list.
- Invite submission of detailed bids from short-listed bidders.
- Arrange for inspection of the railway facilities by the invited bidders.
- Evaluate the bids.
- Select the preferred concessionaire.
- Negotiate the contract and finalise the conditions of concession.
- After both parties have complied with prerequisites, sign the contract.
- Transfer the assets to the concessionaire.
- Transfer the residual assets and staff to another entity for orderly winding down.

It is advisable that bidding and evaluation procedures be transparent, competitive, and contestable. Several groups may have the perception that concessioning will be to their disadvantage and are likely to stall and delay the finalisation of concession agreements if an impression is created that award procedures have not been open, fair, and competitive.

6. Conclusion

In order to survive, railways need to make fundamental changes so that they are able to respond speedily to the dynamic market and user needs in the changing business and competitive environment. Customers are now seeking predictable service and on-line real time information about their consignments. Railways have no option but to respond to such customer demands in order to compete effectively with road transport. Concessioning will eliminate political interference, provide access to capital and technology, and introduce a competitive management culture. It is therefore an eminently suitable option for SADC railways to achieve the desired transformation.

Delay in restructuring or privatisation is not an attractive option because any deterioration in the financial performance of marginally viable railways will make them less attractive for investors. Lack of investor interest tends to limit the level of competition in bidding for concessions. Consequently, the railway or government involved might find itself forced to enter into concession arrangements that are unattractive. In cases in which railways are already nonviable, delay and further distancing from possible viability may place their very survival in serious doubt. Therefore, **the time for action is now**.

References

[to come]

Table 1. Railway Restructuring Options

Option	Main Features	Political Interference	Competition	Fair Intermodal Competition	Time Required	Government Investment and Support	Effect on Viability
Internally restructured government owned parastatal	Freedom to fix tariff, staff, and wage levels, and railway tries to respond to customer needs.	Continues	No change.	No change.	N.A.	Minimal. Railway unable to raise capital and government not willing to invest.	Marginal. Bureaucratic management culture continues.
Separation of infrastructure and operations	Segregation of infrastructure and operations and their respective costs.	No change	No change unless operation is on concession or franchise and infrastructure management on contract.	Fair competition if rail infrastructure use cost fixed on same basis as road.	5–10 years	Very high. Investment on infrastructure and equipment. Continued financial support for infrastructure unless full cost is recovered.	Little unless operation is privatised and infrastructure management on contract or concession.
Outright sale	Loss of government ownership. Irrevocable step.	Removed	Sale on competitive basis. Main competition from road, but no competition within railway.	No change.	Up to 10 years	High. Investments and restructuring required for railway to achieve profitability before being sold. No support after sale.	High.
Concession	Government retains ownership. Concession for limited period (10–30 years). Concessionaire responsible for investment in infrastructure and equipment.	Removed	Concession given on competitive basis. Main competition from road, but no competition within railway.	No change.	3–5 years	Least. Generally no support after concession.	High.
Franchise	Government retains ownership. Franchise for limited period (5–10 years). Franchisee not responsible for investment.	Removed	Competition in award of franchise and also within railway if more than one franchise given.	No change.	2–3 years	High. Government remains responsible for all investments in the railway.	High.
Competitive access	Government retains ownership. Access for limited period (10–15 years). Government investment on infrastructure only. Suitable for high-density railways.	Partly removed	Competition in the railway as well as with road.	Fair intermodal competition if fees for use of infrastructure on rail and road on same basis.	10 years	Fairly high. Infrastructure provision is responsibility of government. Continued financial support required if full cost of infrastructure not recovered.	High.

Note: N.A. = not applicable.

Appendix

CONCLUSIONS FROM SADC RAILWAYS POLICY OPTIONS WORKSHOP

Pretoria, South Africa
9–11 September 1996

The critical role of railways in the provision of an efficient and economical transport service in the SADC region was the focus of the Railways Policy Options Workshop held 9–11 September 1996 in Pretoria. The workshop was primarily concerned with identifying how railways can attain commercial viability through institutional restructuring and policy reform and develop a framework for improving the current situation. Fundamental changes are needed to restore the glory of the railways and improve the quality of service. These changes will require realigning resources with market needs in ways that will enhance the value of the enterprise. It will also require a clean break with past public choice practices, corporate governance protocols, management methods, and institutional arrangements. In this regard SADC countries have agreed to develop a harmonised regional railway network that is seamless, efficient, predictable, cost-effective, safe, environmentally friendly, and responsive to market needs. This is within the framework of the SADC Protocol on Transport, Communications and Meteorology, which has the following elements:

- Restructure railways in a phased and coordinated manner,
- Provide autonomy to railways to enable full commercialisation,
- Increase private sector involvement in railways investment,
- Enhance operational synergy amongst various railway service providers in the region, and
- Promote the establishment of an integrated transport system that supports fair competition amongst railway service providers and other modes.

The workshop, which was funded by USAID, was organised by SATCC-TU in collaboration with the World Bank. Participants came to the conclusions presented in the following paragraphs.

1. Current Progress Towards Economic and Commercial Viability of Railways

1.1 It is generally agreed that, although some efforts have been made in most countries with some degree of success, SADC railways have not yet made sufficient progress towards achieving commercial viability. This conclusion was reached after consideration of shareholder dividends, quality of services to customers, financial market confidence, and adequate remuneration to employees.

2. Problems and Constraints Limiting Progress

2.1 A number of problems and constraints are seen to be limiting the progress of SADC railways towards commercial viability. These problems and constraints are divided broadly into four main categories:

- Lack of political will and guidance for railway restructuring.
- Lack of a clear transport policy, including the appropriate enabling legislation and support for equitable intermodal competition.

- Financial constraints, which include the high debt burden of many railways resulting from misplaced past investments, inadequate working capital, and inadequate funds for restructuring (in particular for managing the process of downsizing still required by most railways).
- Lack of sustainable managerial autonomy to make commercial decisions, such as tariff, service, and staff adjustments, and to ensure that the railways are free of government interference.
- Lack of management commitment to embrace and implement desirable change in terms of organisational restructuring.

3. Options for Achieving Commercial Viability

3.1 Autonomy and level playing fields are essential for the achievement of commercial viability. A good approach for providing autonomy is through concessioning. Concessioning is considered to be an attractive option for commercial orientation. The optimal form of concessioning may vary from railway to railway.

4. Need for Private Sector Participation

4.1 Private sector participation in the operation of SADC railways is considered highly desirable, and may even be essential in many cases if the long-term survival of the railway is to be ensured. The critical element is managerial autonomy, which cannot be fully achieved in a parastatal organisation. In addition, private sector participation should accompany deregulation.

5. Options for Private Sector Participation

5.1 The following options were found appropriate for consideration by member states:

- Concessioning
  - — Entire railways or sections of railways systems
  - — Infrastructure
  - — Operations
  - — Joint ventures with strategic partners
  - — Corridors
- Privatisation
  - — Existing railways or components thereof (outsourcing)
  - — Deregulation to allow Green Field investments
- Management contracts

6. Measures for Regional Harmonisation of Railway Restructuring

6.1 Coordination of efforts by member railways and a harmonised regional transport policy are essential if the benefits from railway restructuring and private sector participation are to be fully realised. This should include

- Guidance for concession options and procedures,
- Improving understanding of market structures,
- Provision of real-time information systems and technical support,
- Implementation of SADC protocols and regional railway integration,
- Multi-operation in terms of concessioning,
- Compilation of coordinated implementation schedule,
- Capital injection and debt relief,

- Human resource development,
- Improved operational efficiency,
- Formalisation of legal requirements, and
- Staff rationalisation.